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| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/800,036 | KANG, SEOK DONG | |
| | Examiner | Art Unit | |
| | Kevin Quarterman | 2889 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 16 November 2007.
2. ☒ The allowed claim(s) is/are 1,3-19,21-34 and 36-47.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/291,605.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and remarks received 16 November 2007 have been entered.

Allowable Subject Matter

2. Claims 1, 3-19, 21-34, and 36-47 are allowed.
3. The following is an examiner's statement of reasons for allowance: Regarding independent claim 1, applicant has incorporated the allowable subject matter of claim 7, which was previously objected to for being dependent upon a rejected base claim. The reasons for the indication of allowable subject matter in claim 7 are repeated here in this office action: the prior art of record neither shows or suggests a plasma display panel comprising, in addition to other limitations of the claim, the pigment concentration of the first light-shielding layer being lower than the pigment concentration of the second light-shielding layer.
4. The closest prior art to independent claim 1, Amemiya (US 2001/0011871), teaches in Figure 2 a plasma display panel comprising a transparent electrode (Xa); a metal bus electrode (Xb''); a first light-shielding layer (Xb') formed between the transparent electrode and the metal bus electrode on each discharge cell; and a second light-shielding layer (30) formed between the adjacent discharge cells, wherein the first light-shielding layer and the second light-shielding layer are different from each other in a thickness thereof and connected to each other. However, Amemiya fails to exemplify a pigment concentration of the first light-shielding layer being lower than the pigment

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concentration of the second light-shielding layer. Due to their dependency upon independent claim 1, claims 3-6, 8, and 12-14 are also allowable.

5. Regarding independent claim 9, applicant has rewritten the claim in independent form including all of the limitations of the rejected base claim, as suggested by the Examiner in the previous office action. The reasons for the indication of allowable subject matter in claim 9 are repeated here in this office action: the prior art of record neither shows or suggests a plasma display panel comprising, in addition to other limitations of the claim, the pigment of the first and the second light-shielding layers being a non-conductive pigment.

6. The closest prior art to independent claim 9, Amemiya, teaches in Figure 2 a plasma display panel comprising a transparent electrode (Xa); a metal bus electrode (Xb''); a first light-shielding layer (Xb') formed between the transparent electrode and the metal bus electrode on each discharge cell; and a second light-shielding layer (30) formed between the adjacent discharge cells, wherein the first light-shielding layer and the second light-shielding layer are different from each other in a thickness thereof and connected to each other. However, Amemiya fails to exemplify a pigment of the first and the second light-shielding layer as a non-conductive pigment. Due to their dependency upon independent claim 9, claims 7 and 10-11 are also allowable.

7. Regarding independent claim 15, the prior art of record neither shows or suggests a plasma display panel comprising, in addition to other limitations of the claim, a plurality of black layers including a first black layer formed between a portion of row electrodes and a first substrate and a second black layer formed between adjacent first

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electrodes, and a thickness of the first black layer is less than 50% of the thickness of the second black layer, wherein the second black layer has a same conductivity as the first black layer.

8. The closest prior art to independent claim 15, Amemiya, teaches a plasma display panel comprising a pair of first and second substrates (10, 13) spaced parallel to each and sandwiching a discharge gas space (C) filled with a discharge gas; a plurality of first electrodes (Xb'', Yb'') arranged on an internal surface of the first substrate; a dielectric layer (11) formed on an internal surface of the first substrate and the plurality of first electrodes; and a plurality of second electrodes (D) arranged on an internal surface of the second substrate, wherein the dielectric layer includes a plurality of black layers (Xb', Yb', 30) between two vertically adjacent discharge cells, and the plurality of black layers includes a first black layer (Xb') formed between a portion of the first electrodes and the first substrate, and a second black layer (30) formed between adjacent first electrodes. However, Amemiya fails to exemplify a thickness of the first black layer being less than 50% of a thickness of the second black layer. Due to their dependency upon independent claim 15, claims 21-34 and 36-38 are also allowable.

9. Regarding independent claim 16, the prior art of record neither shows or suggests a plasma display panel comprising, in addition to other limitations of the claim, first and second light-shielding layers each having a different light-shielding ratio from each other, wherein a pigment concentration of the first light-shielding layer is lower than a pigment concentration of the second light-shielding layer.

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10. The closest prior art to independent claim 16, Amemiya, teaches a plasma display panel comprising a transparent electrode (Xa); a metal bus (Xb"); a first light-shielding layer (Xb') formed between the transparent electrode and the metal bus electrode on each discharge cell; and a second light-shielding layer (30) formed between the adjacent cells, wherein a thickness of the first light-shielding layer is thinner than a thickness of the second light-shielding layer. However, Amemiya fails to exemplify the first and second light-shielding layers each having a different light-shielding ratio from each other, wherein a pigment concentration of the first light-shielding layer is lower than a pigment concentration of the second light-shielding layer. Due to their dependency upon independent claim 16, claims 17-19 are also allowable.

11. Regarding independent claim 39, the prior art of record neither shows or suggests a color plasma display panel comprising, in addition to other limitations of the claim, a plurality of black layers including a first black layer formed between a portion of one of first electrodes and a first substrate and a second black layer formed outside of the first electrodes, and at least one portion of the first black layer has a same thickness as the second black layer.

12. The closest prior art to independent claim 39, Amemiya, teaches a plasma display panel comprising a pair of first and second substrates (10, 13) spaced parallel to each and sandwiching a discharge gas space (C) filled with a discharge gas; a plurality of first electrodes (Xb", Yb") extending horizontally and arranged on an internal surface of the first substrate; a dielectric layer (11) formed on an internal surface of the first substrate and the plurality of first electrodes; and a plurality of second electrodes (D)

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extending vertically and arranged on an internal surface of the second substrate, wherein the dielectric layer includes a plurality of black layers (Xb', Yb', 30) between two vertically adjacent discharge cells, and the plurality of black layers includes a first black layer (Xb') formed between a portion of one of the first electrodes and the first substrate, and a second black layer (30) formed outside of the first electrodes. However, Amemiya fails to exemplify at least one portion of the first black layer having a same thickness as the second black layer. Due to their dependency upon independent claim 39, claims 40-47 are also allowable.

13. The subject light-shielding layers described earlier are provided for preventing discoloration in the color plasma display panel. The design is new and unique to the art.

14. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Quarterman
Examiner
Art Unit 2879

kq 
15 January 2008


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PRIMARY PATENT EXAMINER